

**REMARKS**

In the present Amendment, claim 1 is amended, and no claim is canceled or added. Therefore, claims 1, 2, 4, 5, and 7 are pending in the application, with claim 1 being independent.

Claim 1 has been amended to include subject matter requested by the Examiner. Specifically, claim 1 has been amended to recite that the recording layer includes In and Ge in addition to the previously-recited components. This subject matter finds support in the original application at, *inter alia*, paragraphs [0029] and [0046]. Claim 1 has also been amended to recite that the Mn in the recording layer is included in an amount of at least 18.8 at%. This subject matter finds support in the original application at, *inter alia*, paragraph [0046].

**Claim Rejections – 35 U.S.C. §§ 102 and 103****JP-2003-237230 to SUZUKI et al.**

Claims 1, 2, 4 and 5 are rejected over SUZUKI under 35 US 102(a), or in the alternative, under 103(a). Claim 7 is rejected under 103(a) as obvious over SUZUKI. The rejection states that SUZUKI shows 4% Ge, and that either this is sufficient to inherently meet the limitations of claim 1, or, in the alternative, that it would have been obvious to add In up to 10%, which would allegedly inherently result in a crystal with the recited ratio c/a. The Office Action indicates that this rejection can be obviated by requiring at least 9.3% Mn.

In response, Applicants amend claim 1 to recite that Mn is present in an amount of at least 18.7 at%. It is respectfully submitted that this amendment renders the

rejection moot. Accordingly, reconsideration and withdrawal of this rejection are requested.

EP 1260973 to HARIGAYA and HARIGAYA '346

As an initial matter, EP1260973<sup>1</sup> and Harigaya '346 are family members, and so the rejections over each of these documents will be addressed together.

Claims 1, 2, 4 and 5 are asserted to be anticipated by the HARIGAYA documents, but does not state where the limitations of the current claims are taught in HARIGAYA. Nevertheless, the rejection states that the rejection can be obviated by reciting that the recording layer comprise at least 9.3% Mn.

As discussed above with respect to SUZUKI, claim 1 has been amended to recite that Mn is present in an amount of at least 18.7 at%. It is respectfully submitted that this amendment renders this rejection moot. Accordingly, reconsideration and withdrawal of this rejection are requested.

MATSUNAGA (Phys. Rev. B) in view of TOMINAGA '012

Claims 1, 2, 4, 5 and 7 are rejected as obvious over MATSUNAGA in view of TOMINAGA. The rejection asserts that MATSUNAGA teaches an  $\text{Ag}_{3.4}\text{In}_{3.7}\text{Sb}_{76.4}\text{Te}_{6.5}$  composition with an A7 structure that attains a  $c/a$  of 2.649 at 723 K. The rejection asserts that it would have been obvious in view of TOMIONAGA to add less than 5% of additives such as Ti, Zr, Hf, V, Nb, Ta, W, Mo and/or Mn to improve reliability and other properties. The rejection then speculates that the resulting composition could be heated to 723 K with a reasonable expectation of maintaining the A7 structure. The

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<sup>1</sup> The rejection refers to "EP 12609783." It is believed that this is a typographical error, and that the document referred to is actually EP 1260973.

rejection also states that the rejection can be obviated by reciting that the recording layer comprise at least 9.3% Mn.

This rejection does not even make out a *prima facie* case of obviousness, because there is no reason to modify MATSUNAGA to obtain the presently-claimed composition, and the assertion that such a composition would have the properties of the presently claimed articles of manufacture at 723 K is pure unwarranted speculation.

Nevertheless, as discussed above with respect to SUZUKI, claim 1 has been amended to recite that Mn is present in an amount of at least 18.7 at%. It is respectfully submitted that this amendment renders this rejection moot. Accordingly, reconsideration and withdrawal of this rejection are requested.

#### **Claim Rejection under 35 U.S.C. § 112**

The Office Action rejects claims 1, 2, 4 and 5 under 35 USC § 112, first paragraph. The rejection acknowledges that the specification is enabling for MgInSbTeSb having axial ratio  $a/c$  as recited in claim 1, but asserts that the specifically-recited  $a/c$  is not enabled in the absence of Ge and In. The rejection implies that amending claim 1 to recite Ge and In would obviate this rejection.

In response, claim 1 is amended to recite Ge and In in the recording layer. Thus, it is respectfully submitted that this rejection is now moot. It is respectfully submitted that this amendment obviates the rejection. Accordingly, reconsideration and withdrawal of this rejection are requested.

**CONCLUSION**


In view of the foregoing remarks and amendments, Applicants respectfully submit that the claims are allowable and in condition for allowance.

In this regard, it is noted that the Examiner suggested amending the Mn content to "at least 9.3% Mn," and the Applicants have amended the claims to recite that Mn is included in an amount of at least 18.7 at%. By the present amendment, Applicants do not disclaim or surrender amounts of Mn between 9.3% and 18.7%, and no such estoppel should be inferred.

If any additional fees are required for consideration of this response, the Office is authorized to charge those fees to Deposit Account No. 19-0089.

Any comments or questions concerning this application can be directed to the undersigned at the telephone number given below.

Respectfully submitted,  
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